H3C S1216/1224 Ethernet Switch

User Manual

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http://www.h3c.com

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CE

This equipment complies with the following European Directives: 89/336/EEC (electromagnetic compatibility), 73/23/EEC (low voltage).

Notice

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About This Manual

Organization

This document is organized as follows:

Chapter	Content
Chapter1 Product Overview	This chapter describes the appearance and features of this product.
Chapter2 Switch Installation	This chapter describes the precautions and steps to install this product.

Conventions

The manual uses the following conventions:

I. Symbols

Convention	Description
Caution	Means reader be careful. Improper operation may cause data loss or damage to equipment.
🕮 Note	Means a complementary description.

Environmental Protection

This product has been designed to comply with the requirements on environmental protection. For the proper storage, use and disposal of this product, national laws and regulations must be observed.

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Chapter 1 Product Overview

1.1 Introduction

H3C S1216 and S1224 Ethernet switches are management-free Gigabit Ethernet products. They offer wire-speed Layer 2 switching that is available immediately after the products are powered on without any configuration.

The S1216 provides 16 autosensing 10/100/1000Base-T Ethernet ports and the S1224 offers 24 autosensing 10/100/1000Base-T Ethernet ports.

1.2 Product Specifications

Table 1-1 Specifications of the S1216/1224

Item	Description
Physical dimensions (H × W × D)	S1216: 44 × 330 × 230 mm (1.7 × 13.0 × 9.1 in.) S1224: 44 × 330 × 230 mm (1.7 × 13.0 × 9.1 in.)
Port	S1216: 16 autosensing 10/100/1000Base-T Ethernet ports S1224: 24 autosensing 10/100/1000Base-T Ethernet ports

Item	Description
Port attributes	RJ-45 connector Compliant with IEEE 802.3, IEEE 802.3u and IEEE 802.3ab 10/100/1000 Mbps transmission rates Half duplex, full duplex and auto-negotiation Auto-MDI/MDI-X
Cable	10Base-T: Category-3/-4/-5 twisted pair cable, with maximum transmission distance 100 m (328.1 ft.) 100Base-TX: Category-5 twisted pair cable, with maximum transmission distance 100 m (328.1 ft.) 1000Base-T: Category-5 twisted pair cable, with maximum transmission distance 100 m (328.1 ft.)
Input voltage	100 VAC to 240 VAC, 50 Hz/60 Hz
Power consumption	S1216: 24 W S1224: 30 W
Operating temperature	0°C to 40°C (0°F to 107°F)
Storage temperature	–10°C to +70°C (14°F to 158°F)
Operating humidity (noncondensing)	20% to 85%
Storage humidity (noncondensing)	10% to 90%

Item	Description
System cooling	One fan for cooling

Table 1-2 Features of the S1216/1224

Features	Description
Wire-speed Layer 2 switching	All ports support wire-speed forwarding All ports are in the same broadcast domain
Switching mode	Store and forward
MAC address	Address auto-learning and auto-aging (with aging time 300 seconds) Maximum MAC address entries:

1.3 Hardware Description

1.3.1 Product Appearance

I. Front panel

As shown in Figure 1-1, the S1216 has on its front panel from the left to the right: power LED, port LEDs, 16 10/100/1000Base-T ports and one flow control switch.

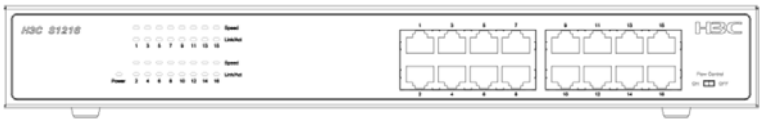

Figure 1-1 Front view of the S1216

Note:

- You can enable/disable the flow control function of the S1216 by turning the flow control switch to “ON” and “OFF” respectively.
- If any change is made to the flow control function status, reboot the switch so that the change takes effect.

As shown in Figure 1-2, the S1224 has on its front panel from the left to the right: power LED, port LEDs, 24 10/100/1000Base-T ports and one flow control switch.

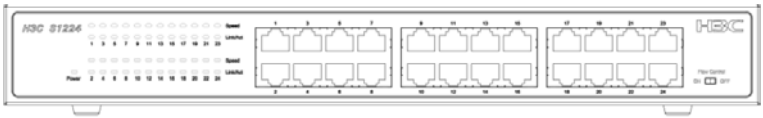

Figure 1-2 Front view of the S1224

Note:

- You can enable/disable the flow control function of the S1224 by turning the flow control switch to “ON” and “OFF” respectively.
- If any change is made to the flow control function status, reboot the switch so that the change takes effect.

II. Rear panel

The S1216/1224 has an AC power socket, a grounding pole, and a vent on its rear panel as shown in Figure 1-3.

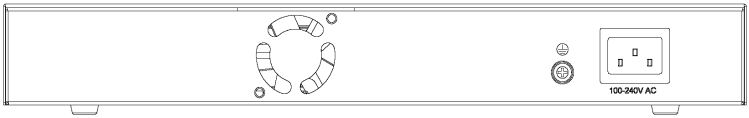

Figure 1-3 Rear view of the S1216/1224

1.3.2 LEDs

Table 1-3 LEDs of the S1216/1224

LED	Status	Indication
Power	ON	The switch is powered on.
	OFF	The switch is powered off.
Speed	Green	The port works in 1000 Mbps mode.
	Orange	The port works in 10/100 Mbps mode.
	OFF	No Ethernet link is present.
Link/Act	Green	An Ethernet link is present.
	Blinking green	Packets are being received and/or transmitted at the port.
	OFF	No Ethernet link is present.

Chapter 2 Switch Installation

2.1 Installation Preparations

2.1.1 Safety precautions

To avoid any equipment damage or bodily injury caused by improper use of the S1216/1224, take the precautions listed below:

- Before cleaning the switch, unplug the switch connector first. Do not clean the switch with wet cloth or liquid.
- Do not place the switch near water or in any damp area. Prevent water or moisture from entering the switch chassis.
- Keep the switch to operate in a clean environment. Heavy dust will not only affect the life span of the device, but also cause communication failure due to the static absorption in the environment.
- The S1216/1224 performs the cooling with a fan as it generates a large amount of heat. Keep the switch in good ventilation condition. Do not place one switch on another.
- The switch can only operate normally under proper voltage input. Make sure that the operating voltage is consistent with that labeled on the switch.
- Do not open the chassis while the switch is in operation. Do not open the chassis if not necessary, even when the switch is not powered on.

Caution:

There is a seal on one mounting screw on the chassis of the switch. This seal must remain intact unless the agent is on the spot to maintain your switch. Please contact your local agent and get permission if you need to open the chassis. Otherwise, you will have to bear the responsibilities for all the serious consequences arising therefrom.

2.1.2 Installation Environment

The S1216/1224 can be installed in the corridor or inside the room. The following requirements should be met for the installation:

- There is enough space (more than 10 cm (0.33 in.)) near the ventilation hole of the switch for heat dissipation of the switch chassis.
- The installation site has an effective cooling system.
- The cabinet where the S1216/1224 is located is solid enough to hold the S1216/1224 and its accessories.
- The cabinet is well grounded.

2.1.3 Electromagnetic Environment

In operation, the switch may be affected by exterior interference in radiation and conduction way. Therefore, be sure to:

- Use a monophase three-wire power socket with Protection Earth (PE) as the AC power supply unit is a TN system.

Thereby, the filter circuit in the equipment can effectively filter interference from the power supply system.

- Keep the switch far away from high-power radio launchers, radar launchers, and equipments with high-frequency and high-current.
- Use electromagnetic shielding if necessary. For example, use shielded port cable.
- Wire the port cable indoors. Outdoor cabling is prohibited, to prevent the signal port from possible damages that may be caused by overvoltage and overcurrent of lightning strike.

2.2 Installing the Switch

Note:

During the installation, you are recommended to wear an ESD-preventive wrist strip, which can be connected to the grounding cable of the workbench, to eliminate possible static damage to the switch.

2.2.1 Sticking feet

Step 1: Remove the paper covering the adhesive end of the feet.

Step 2: Stick the adhesive end of the feet to the circular recess on the bottom of the chassis.

2.2.2 Connecting Power Cord

Step 1: Check if the required power supply unit is used.

Step 2: Insert one end of the power cord to the input socket of the switch and the other end to the socket of the external power supply.

Step 3: Check the status of the Power LED on the switch. ON means the connection is OK.

2.2.3 Examining the Installation

- Check if the cables are correctly connected with the S1216/1224.
- Check if all port cables are wired indoors.